

What is claimed is:

1. An apparatus for driving an agitator of an upright vacuum cleaner, the apparatus comprising:

5 a motor for driving a suction fan of the vacuum cleaner;

a driving shaft roller installed at an end of the motor, around which a power transmission member is wound intermittently;

a bushing mounted on an outer circumference of the driving shaft roller;

10 a fixing panel fixed to the vacuum cleaner;

a rotational driving part which the bushing is inserted at a center thereof, the rotational driving part rotating around the driving shaft roller;

15 a selection lever rotating around a lever hole hinge-coupled to the fixing panel by an external force caused by a user;

a selection link one end of which is hinge-coupled to the body of the selection lever;

20 a support sphere formed extending in a direction of an axis parallel with the driving shaft roller on an outer circumference of the rotational driving part and coupled with the other end of the selection link;

a roller support part formed extending in an opposite direction to the support sphere;

an idle roller which is inserted into an outer circumference of the roller support part and around which the power transmission member is wound intermittently due to rotation of the entire rotational driving part so that power is controlled to
5 be transmitted; and

a stop means for maintaining a position which is determined by a self-rotation of the rotational driving part.

2. The apparatus according to claim 1, wherein the power
10 transmission member is a belt made of elastic material.

3. The apparatus according to claim 1, wherein the stop means comprises:

a hanging protrusion formed on a predetermined position of
15 the outer circumference of the rotational driving part; and

a stopper guide made of elastic material and extending from the fixing panel such that the hanging protrusion is locked.

4. The apparatus according to claim 1, wherein the fixing
20 panel comprises an insertion hole into which the support sphere is inserted to guide positional movement of the support sphere.

5. The apparatus according to claim 4, wherein the insertion hole is shaped in a circular arc having a predetermined width.

5 6. The apparatus according to claim 1, further comprising a protection cover fixed on the fixing panel, for covering a separated outer side of the selection lever so as to protect the selection lever.

10 7. The apparatus according to claim 1, wherein the stop means comprises:

a hanging protrusion formed on the outer circumference of the rotational driving part;

a hanging jaw on which the hanging protrusion is locked; and

15 an elastic bent portion extending from the hanging jaw, for allowing the hanging jaw to behave elastically.

8. The apparatus according to claim 7, further comprising a guide portion formed bent at one side surface of the elastic bent portion, for guiding a rotational operation of the rotational driving part.

9. The apparatus according to claim 1, wherein the selection link is formed curved.

10. The apparatus according to claim 1, further comprising a handling part which is fixed to one end of the selection lever and to which an external force of a user is applied.

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11. An apparatus of driving an agitator of an upright vacuum cleaner, the apparatus comprising:

a driving shaft roller installed at an end of a motor of the vacuum cleaner, around which a power transmission member is wound
10 intermittently;

a bushing installed on an outer circumference of the driving shaft roller coaxially with a driving shaft;

a fixing panel inserted onto the bushing;

a selection lever rotating about a lever hole hinge-coupled
15 to the fixing panel by an external force caused by a user;

a selection link whose one end is hinge-coupled to the body of the selection lever;

a rotational driving part including a rotation guide which is shaped in a circular skirt and into which a bushing is
20 inserted and rotated, a support sphere formed extending in a direction of an axis parallel with the driving shaft roller on an outer circumference of the rotation guide and coupled with one end of the selection link, and a roller support part formed extending in an opposite direction to the support sphere;

an idle roller which is inserted onto an outer circumference of the roller support part and around which the power transmission member is wound intermittently due to a self-rotation of the entire rotational driving part such that a power transmission is controlled; and

a stop means for maintaining a position which is determined by the self-rotation of the rotational driving part.

12. The apparatus according to claim 11, wherein the power transmission member is a belt made of elastic material.

13. The apparatus according to claim 11, wherein the stop means comprises:

a hanging protrusion formed on a predetermined position of the outer circumference of the rotational driving part; and

a stopper guide made of elastic material and extending from the fixing panel such that the hanging protrusion is intermittently locked.

14. The apparatus according to claim 11, wherein the fixing panel comprises an insertion hole shaped in a circular arc and into which the support sphere is inserted.

15. The apparatus according to claim 11, further comprising a protection cover for protecting the selection lever externally.

16. The apparatus according to claim 11, wherein the stop
5 means comprises:

a hanging protrusion formed on the outer circumference of the rotation guide; and

a stopper guide essentially including a hanging jaw which is bent to lock the hanging protrusion, and an elastic bent portion
10 extending from the hanging jaw.

17. The apparatus according to claim 11, further comprising a handling part which is fixed to one end of the selection lever.

15 18. An apparatus of driving an agitator of an upright vacuum cleaner, the apparatus comprising:

a driving shaft roller which is connected to a motor for driving a suction fan of the vacuum cleaner and around which an elastic member is selectively wound;

20 a bushing installed on an outer circumference of the driving shaft roller coaxially with a driving shaft;

a fixing panel and a rotational driving part which are inserted into the bushing and fixed;

a support sphere and a roller support part which are formed in a direction of an axis parallel with the driving shaft roller on an outer circumference of the rotational driving part;

5 a manipulating means connected with the support sphere, for manipulating the rotational driving part;

an idle roller which is inserted into the roller support part and around which an elastic member is wound; and

a stop means for maintaining a position of the rotational driving part stably.

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19. An apparatus of driving an agitator of an upright vacuum cleaner, the apparatus comprising:

a driving shaft roller extending from the vacuum cleaner;

15 a fixing panel and a rotation guide which are positioned outside the driving shaft roller and guided coaxially with the driving shaft roller;

a support sphere and a roller support part which are formed in a direction of an axis parallel with the driving shaft roller on an outer circumference of the rotation guide;

20 an idle roller which is inserted into the roller support part;

a manipulating means connected with the support sphere, for manipulating the rotation guide so that the elastic member is

selectively wound around the driving shaft roller or the idle roller; and

a stop means for maintaining a position of the rotational driving part stably.

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20. The apparatus according to claim 19, wherein the roller support part comprises an insertion groove formed on an outer circumference thereof such that the idle roller is mounted.

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21. The apparatus according to claim 19, wherein the idle roller is a bearing, which is formed only on a partial outer circumference of the roller support part.

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22. The apparatus according to claim 19, wherein the rotation guide comprises a mounting portion formed on a predetermined portion of an outer circumference of the rotation guide, for supporting the location of the rotation guide when the elastic member is wound on the driving shaft roller.

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23. The apparatus according to claim 22, wherein the mounting portion comprises one sided portion formed in a tangential direction and the other sided portion formed protrudedly.